WHAT IS CLAIMED IS:

1. An optical glass having a refractive index nd of at least 1.875, an Abbe's number νd of at least 39.5 and a glass transition point Tg of 700°C or lower.

2. The optical glass of claim 1, which is a borosilicate glass comprising at least one selected from La_2O_3, Gd_2O_3, Y_2O_3 or Yb_2O_3 and at least one selected from ZrO_2, Ta_2O_5 or Nb_2O_5, wherein the weight ratio of the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 to the total content of SiO_2 and B_2O_3 is from 2 to 4 and the weight ratio of the total content of ZrO_2, Ta_2O_5 and Nb_2O_5 to the total content of SiO_2 and B_2O_3 is from 1 to 2.

3. The optical glass of claim 2, which further contains ZnO whose weight ratio to the total content of SiO_2 and B_2O_3 is more than 0 but not more than 2.

4. The optical glass of claim 3, wherein the weight ratio of the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 to the total content of SiO_2 and B_2O_3 is from 2 to 4, the weight ratio of the total content of ZrO_2, Ta_2O_5 and Nb_2O_5 to the total content of SiO_2 and B_2O_3 is from 1 to 2 and the weight ratio of ZnO to the total content of SiO_2 and B_2O_3 is from 0.1 to 0.5.

5. The optical glass of claim 1, which has a glass composition comprising, by % by weight, 3 to 10 % of SiO_2, 7 to 15 % of B_2O_3, 0 to 5 % of GeO_2, 0 to 15 % of ZnO, 30 to 60 % of La_2O_3, 0 to 30 % of Gd_2O_3, 0 to 10 % of Y_2O_3, 0 to 5 % of Yb_2O_3, 2 to 8 % of ZrO_2 and 13 to 19 % of Ta_2O_5, wherein the total content of SiO_2, B_2O_3 and GeO_2 is 14 to 20 % by weight, the total content of B_2O_3 and ZnO is at least 9 % by weight, the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 is 50 to 60 % by weight and the total content of the above components is at least 95 % and further wherein the composition contains, by % by weight, 0 to 1 % of Li_2O and 0 to 3 % of Nb_2O_5.

6. The optical glass of claim 5, which contains, by % by weight, 9 to 12 % of B_2O_3 and 1 to 7 % of ZnO and has a B_2O_3 and ZnO total content of at least 12 % by weight.

7. The optical glass of claim 5 or 6, which contains, by % by weight, 6 to 9 % of SiO_2, 9 to 12 % of B_2O_3 and 0 to 5 % of GeO_2 and has an SiO_2, B_2O_3 and GeO_2 total content of 16 to 19 % by weight.

8. The optical glass of claim 1, which has a glass composition comprising, by % by weight, 5 to 10 % of SiO_2, 7 to 13 % of B_2O_3, 0 to 5 % of GeO_2, 0 to 15 % of ZnO, 30 to 60 % of La_2O_3, 0 to 30 % of Gd_2O_3, 0 to 5 % of Y_2O_3, 0 to 5 % of Yb_2O_3, 2 to 8 % of ZrO_2 and 13 to 19 % of Ta_2O_5, wherein the total content of SiO_2, B_2O_3 and GeO_2 is 14 to 20 % by weight, the total content of B_2O_3 and ZnO is at least 9 % by weight and the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 is 50 to 60 % by weight, and further wherein the total content of the above components exceeds 95 % by weight, the composition further contains, by % by weight, 0 to 3 % of Nb_2O_3, 0 to 3 % of WO_3, 0 to 3 % of Al_2O_3, 0 to 3 % of Bi_2O_3, 0 to 3 % of Ga_2O_3 and 0 to 1 % of Sb_2O_3, the total content of BaO, SrO, K_2O and MgO is 0 to 3 % by weight, and the total content of Na_2O, K_2O and Li_2O is 0 to 1 % by weight.

9. An optical glass which is a borosilicate glass comprising at least one selected from La_2O_3, Gd_2O_3, Y_2O_3 or Yb_2O_3 and at least one selected from ZrO_2, Ta_2O_5 or Nb_2O_5, wherein the weight ratio of the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 to the total content of SiO_2 and B_2O_3 is from 3.2 to 5 and the weight ratio of the total content of ZrO_2, Ta_2O_5 and Nb_2O_5 to the total content of SiO_2 and B_2O_3 is from 1.1 to 1.5, and which has a refractive index nd of at least 1.875 and an Abbe's number νd of at least 39.5.

10. An optical glass which is a borosilicate glass comprising at least one selected from La_2O_3, Gd_2O_3, Y_2O_3 or Yb_2O_3, at least one selected from ZrO_2, Ta_2O_5 or Nb_2O_5 and ZnO,

wherein the weight ratio of the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 to the total content of SiO_2 and B_2O_3 is from 2 to 5, the weight ratio of the total content of ZrO_2, Ta_2O_5 and Nb_2O_5 to the total content of SiO_2 and B_2O_3 is from 0.5 to 3 and the weight ratio of ZnO to the total content of SiO_2 and B_2O_3 is at least 0.14, and which has a refractive index nd of at least 1.875 and an Abbe's number vd of at least 39.5.

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11. The optical glass of claim 9 or 10, which has a glass composition comprising, by % by weight, 3 to 10 % of SiO_2, 7 to 15 % of B_2O_3, 0 to 5 % of GeO_2, 0 to 15 % of ZnO, 30 to 60 % of La_2O_3, 0 to 30 % of Gd_2O_3, 0 to 10 % of Y_2O_3, 0 to 5 % of Yb_2O_3, 2 to 8 % of ZrO_2 and 13 to 19 % of Ta_2O_5, wherein the total content of SiO_2, B_2O_3 and GeO_2 is 14 to 20 % by weight, the total content of B_2O_3 and ZnO is at least 9 % by weight and the total content of La_2O_3, Gd_2O_3, Y_2O_3 and Yb_2O_3 is 50 to 60 % by weight, and further wherein the total content of the above components exceeds 95 % by weight and the glass composition contains 0 to 1 % by weight of Li_2O and 0 to 3 % by weight of Nb_2O_5.

12. The optical glass of claim 11, which contains, by % by weight, 9 to 12 % of B_2O_3 and 1 to 7 % of ZnO and has a total content of B_2O_3 and ZnO of at least 12 % by weight.

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13. The optical glass of claim 11 or 12, which contains, by % by weight, 6 to 9 % of SiO_2, 9 to 12 % of B_2O_3 and 0 to 5 % of GeO_2 and has an SiO_2, B_2O_3 and GeO_2 total content of 16 to 19 % by weight.

14. An optical glass comprising, by % by weight, 3 to 10 % of SiO_2, 7 to 15 % of B_2O_3, 30 to 60 % of La_2O_3, 2 to 8 % of ZrO_2 and 13 to 19 % of Ta_2O_5, wherein the total content of SiO_2 and B_2O_3 is 14 to 20 % by weight, and the total content of the above components is at least 95 % by weight.

15. The optical glass of claim 14, wherein part of La_2O_3 is replaced with Gd_2O_3 and/or Y_2O_3, the content of Gd_2O_3 is 0

to 30 % by weight, the content of Y_2O_3 is 0 to 10 % by weight, the optical glass containing 0 to 15 % by weight of ZnO, and further wherein the total content of ZnO and B_2O_3 is at least 9 % by weight, the optical glass having a glass transition point Tg of 700°C or lower.

16. The optical glass of claim 14, wherein part of La_2O_3 is replaced with Gd_2O_3 and/or Y_2O_3, the content of Gd_2O_3 is 0 to 30 % by weight, the content of Y_2O_3 is 0 to 10 % by weight, the content of ZnO is 0 to 15 % by weight, the content of Nb_2O_5 is 0 to 3 % by weight and the content of Li_2O is 0 to 1 % by weight, the optical glass having a glass transition point Tg of 700°C or lower.

17. A glass preform made of the optical glass recited in claim 1, 9, 10 or 14.

18. An optical product made of the optical glass recited in claim 1, 9, 10 or 14.

19. A process for the production of the optical product recited in claim 18, which comprises the steps of melting raw materials for a glass and directly press-molding a molten glass.

20. The process of claim 19, which further comprises the step of annealing a glass molded material obtained by the press-molding, after the step of directly press-molding a molten glass.

21. A process for the production of an optical product, which comprises the steps of softening the glass preform recited in claim 17 under heat and press-molding the glass preform softened under heat.

22. The process of claim 21, which further comprises the step of annealing a glass molded material obtained by the press-molding, after the step of press-molding the glass

preform.